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NOTICE OF ALLOWANCE AND FEE(S) DUE

2292 7590 04/28/2009

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

GEBRESILASSIE, KIBROM K

ART UNIT

PAPER NUMBER

2128

DATE MAILED: 04/28/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/996,745

11/30/2001

Jakob Lichtenberg

0993-0101P

4472

TITLE OF INVENTION: METHOD OF CONFIGURING A PRODUCT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	07/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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**BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747**

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,745	11/30/2001	Jakob Lichtenberg	0993-0101P	4472

TITLE OF INVENTION: METHOD OF CONFIGURING A PRODUCT

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nonprovisional	YES	\$755	\$300	\$0	\$1055	07/28/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
GEBRESILASSIE, KIBROM K	2128	703-001000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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09/996,745	11/30/2001	Jakob Lichtenberg	0993-0101P	4472

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GEBRESILASSIE, KIBROM K

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2128

DATE MAILED: 04/28/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 548 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 548 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	09/996,745	LICHTENBERG ET AL.	
	Examiner	Art Unit	
	KIBROM K. GEBRESILASSIE	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 02/13/2009.
2. ☒ The allowed claim(s) is/are 1,3,5-34,36-38 and 44-46.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

/Kibrom K Gebresilassie/
Examiner, Art Unit 2128

DETAILED ACTION

1. This communication is responsive to amended application filed on 02/13/2009.
2. Claims 1, 3, 5-34, 36-38, and 44-46 are presented for examination.
3. Claim 39 has been canceled.

Response to Arguments

4. Applicants are thanked for amendments/Remarks.
5. Applicants also thanked for incorporating allowable subject matter of Claim 39 to Claim 1.
6. Applicant's argument relating to Objection to the drawing is considered and therefore the objection is withdrawn.
7. Applicant's amendment relating to art rejection is considered and therefore the rejection is withdrawn.
8. Regarding 101 rejection, the rejection is withdrawn based on examiner amendment shown below authorized by applicant representative.

EXAMINER'S AMENDMENT

9. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Cheng-Kang Hsu (Reg. No. 61, 007) on 04/16/2009.

Amendment to Claims:

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- Claim 1 (line 1) "A method of configuring an apparatus comprising", delete "an apparatus", and insert -- a product assisted by a computer--.
- Claim 1 (line 8) "iteratively configuring the apparatus by repeatedly", delete "apparatus", and insert --product assisted by the computer--.
- Claim 1 (lines 13 and 17) "thereby the apparatus being configured" and "wherein the step of iteratively configuring the apparatus further comprises:", delete "apparatus", and insert --product--.
- Claim 20 (lines 6 and 9), "the path relate to a compatible apparatus" and "the path relate to a non-compatible apparatus", delete "apparatus", and insert --product--.
- Claim 23 (line 2), "iteratively configuring the apparatus comprises", delete "apparatus", and insert --product--.
- Claim 26 (line 3), "relating to the apparatus", delete "apparatus", and insert --product--.
- Claim 28 (line 4), "information of compatibility of the apparatus", delete "apparatus", and insert --product--.
- Claim 36 (line 5), "the step of iteratively configuring the apparatus", delete "apparatus", and insert --product--.
- Claim 37 (line 4), "the step of iteratively configuring the apparatus", delete "apparatus", and insert --product--.
- Claim 38 (line 8), "iteratively configuring the apparatus", delete "apparatus", and insert --product--.

- Claim 46 (line 3), “at least one apparatus”, delete “apparatus”, and insert – product--.
- Claim 8 (lines 3 and 4), “all possible compatible apparatuses comprising at least one chosen alternative for each of the apparatuses”, delete “apparatuses”, and insert –products--.
- Claim 9 (lines 2 and 3), “all possible compatible apparatuses comprising at least one chosen alternative for each of the apparatuses”, delete “apparatuses”, and insert –products--.
- Claim 19 (lines 4 and 5), “the pointers of the path relate to either compatible apparatuses or non-compatible apparatuses”, delete “apparatuses”, and insert –products--.
- Claim 23 (lines 3 and 4), “all possible compatible apparatuses comprising at least one chosen alternative for each of the apparatuses”, delete “apparatuses”, and insert –products--.

Allowable Subject Matter

10. Claims 1, 3, 5-34, 36-38, and 44-46 are allowed.

11. The following is an examiner’s statement of reasons for allowance: Claims 1, 3, 5-34, 36-38, and 44-46 are considered allowable since when reading the claims in light of the specification, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in the independent claim, specifically, defining rules relating to compatibilities between alternatives from different components, representing the rules in a Directed Acyclic Graph (DAG),

for each pair of component and alternative providing a classification of the state of the pair,

adopting the classification to one of a list of outcomes comprising blocked, selectable, user selected, system selected, or forceable,

providing a classification of blocked when the alternative cannot be chosen for the component even without considering choices of alternatives for other components,

providing a classification of selectable when the alternative for the component is compatible with the chosen alternatives from the other components,

providing a classification of user selected when the alternative has already been chosen for the component,

providing a classification of system selected when the alternative is the only choice for the component that is compatible with the chosen alternatives from the other components and the alternative has not been chosen by the user,

providing a classification of forceable when the alternative can be chosen for the component but is incompatible with some of the other choices of alternatives of the other components, and

providing information on the classification to the user (as specified in specification pg. 23, lines 13-15, pg. 24 lines 5-21, pg. 36 line 1 through pg. 39 line 4, pg. 42 lines 4-23, pg. 43 lines 1-13).

12. The nearest prior art of reference (US Patent No. 5, 515, 524) discloses configuring systems based on component or resource requests, or input in the form of

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need. However, the reference is silent whether rules are represented by DAG. Further, the reference is silent whether to provide the information of classification to user as list of outcomes comprising blocked, selectable, user selected, system selected, or forceable. Therefore, the reference is non-obvious to the claimed invention.

13. The nearest prior art of reference ("An Object Model for Evolutionary configuration Management") discloses configuration management and object models for representing the configuration process. However, the reference is silent whether to provide the information of classification to user as list of outcomes comprising blocked, selectable, user selected, system selected, or forceable. Therefore, the reference is non-obvious to the claimed invention.

14. A specific practical application of the invention is for at least configuring a product such as bike and a computer. For example, applicants specification recites:

Page 18 lines 4-12:

A computer assisted configuration of the bike is now performed. The computer program shows possible alternatives for each component. The user of the computer program selects a component and selects one of the possible alternatives for this component. For example, the user can choose the gear component, and that the gear should be external. Based on the user's selection the computer program uses the virtual table for finding out which subsequent selections that will lead to consistent configurations. For example the computer program will use the virtual table to determine that a selection of an external gear implies that the frame must be a carbon frame. This interactive process continues until an alternative has been selected for each component. The result of this configuration process is a consistent product configuration.

Page 18 lines 26-30:

An example of a product model is a product model of a computer, composed of a motherboard (three different alternatives), a CPU (two alternatives), and a hard disk (two alternatives). Since a CPU is connected to a motherboard using a slot, the slot type is an important attribute of both the CPU and the motherboard and since a hard disk is connected to a motherboard using a specific controller type, the controller type is also an important attribute.

Therefore, the claimed invention has a specific practical application of configuring a product model such as a bike and computer components and therefore it is statutory.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIBROM K. GEBRESILASSIE whose telephone number is (571)272-8571. The examiner can normally be reached on 8:00 am - 4:30 pm Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamini S Shah/
Supervisory Patent Examiner, Art
Unit 2128

/Kibrom K Gebresilassie/
Examiner, Art Unit 2128